

ABSTRACT OF THE DISCLOSURE

Disclosed is a method of designing rubber composite executed as follows. A shape of the rubber composite, a shape of the each part (i) constituting the rubber composite and physical properties of a rubber material used for each part (i) are tentatively selected respectively. Thereafter, the rubber composite is divided into many finite elements, and strain in each element is calculated by the finite element method to obtain maximum principal strain $(\epsilon_i)_{\max}$ of the elements in each part (i). Then, the tentative selections of the shape of the rubber composite, the shape of each part (i) and the physical properties of the rubber material, and the calculations by the finite element method are repeated until an allowance ratio S_{ia} calculated as a ratio of strain $(\epsilon_i)_b$ at break to the maximum strain $(\epsilon_i)_{\max}$ becomes equal to a specified reference allowance ratio S_0 or higher in all of the parts (i). The shape of the rubber composite, the shape of each part (i) and the physical properties of the rubber material are thus determined.